IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicant(s): H. E. Butterworth et al.
Docket No.: UK999-027
Serial No.: 09/401,676
Filing Date: September 22, 1999
Group: 2131
Examiner: Christian A. La Forgia

Title: Data Processing Systems and Method
for Processing Work Items in Such Systems

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

Sir:

This Reply Brief is submitted in response to the Examiner's Answer dated November 27, 2006 in the above-referenced application.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The Examiner in his Answer to the Appeal Brief filed by Appellants on September 15, 2006, asserts that the statement on the grounds of rejection to be reviewed on appeal is substantially correct. Appellants note that the Examiner has changed the §103(a) rejection from the final Office Action to include claims 1-11.

ARGUMENT

The Examiner in his Answer to the Appeal Brief filed by Appellants on September 15, 2006, reasserts his arguments that claims 1-11 are rejected under 35 U.S.C. §103(a), and claims 12-14 are rejected under 35 U.S.C. §102(a) and (e). Appellants respectfully disagree with the contentions presented by the Examiner in the Answer, for at least the reasons identified below, as well as for those reasons previously set forth in the Appeal Brief.

With regard to the issue of whether claims 1, 3, 5, 7, 9 and 10 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over Hoffman in view of AAPA, the Examiner's Answer contends that Hoffman discloses switching to the polling system upon receiving an interrupt and scheduling work items speculatively while the interrupt is processed. Appellants respectfully reassert that the combined teaching of Hoffman and AAPA fails to disclose all the limitations of the subject claims for at least the reasons previously presented in the Appellants' Appeal Brief.

Appellants again assert that Hoffman fails to disclose <u>the speculative scheduling of a further task for processing of subsequently received work items, when there are no additional work items for processing, without enabling interrupts,</u> as recited in independent claim 1.

On page 9 of the Examiner's Answer, the Examiner contends that "polling is the process of determining the status of devices so that the active program can process the events generated by each device." The Examiner further contends that since each device is allocated a time segment to schedule anything that requires processing, polling is a speculatively scheduling processing system. Appellants respectfully assert that the Examiner has made a large leap in equating the polling of Hoffman with the speculative scheduling of the present invention. While polling may involve continuous querying of devices to determine whether a service is required, Hoffman does not disclose the speculative scheduling of a service that enables required device servicing in the future,

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when there is currently no device service required. Appellants further respectfully assert that the Examiner is relying on evidence not provided within Hoffman or AAPA in order to maintain the rejection.
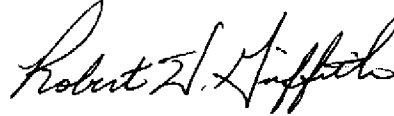
Hoffman discloses the polling of a device and the determination of a rate of service requests, however Hoffman fails to disclose that such polling and rate determination techniques include the speculative scheduling of a task that enables the processing of subsequently received work items, when there are currently no work items available for processing. The Examiner further points to FIG. 4 in order to support the obviousness rejection, however, much like the rest of Hoffman, FIG. 4 provides no support for the speculative scheduling of a task that enables the processing of subsequently received work items, when there are currently no work items available for processing.

With regard to the issue of whether claims 2, 6 and 11 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over Hoffman in view of AAPA, the Examiner's Answer contends that FIG. 4 of Hoffman shows a loop that continually polls devices and executes the services required by those devices. Appellants again assert that FIG. 4 of Hoffman fails to disclose the speculatively scheduled task as described above, the execution of such a task, and the speculative scheduling of an additional task that enables the processing of subsequently received work items after the existing work items are processed.

With regard to the issue of whether claims 12-14 are properly rejected under 35 U.S.C. §102(a) and (e) as being anticipated by Scales, the Examiner's Answer contends that Scales teaches the providing of an interrupt-based mechanism for processing work items when system utilization is low, and providing a polling-based mechanism for processing work items when system utilization is high. Appellants respectfully assert that the mentioning of the possible use of an interrupt-based mechanism instead of a polling-based mechanism, as well as the disadvantages of using the interrupt-based mechanism instead of the polling-based mechanism, fails to provide the disclosure necessary to support such an anticipation rejection. Thus, a statement in Scales that an interrupt-mechanism may be used but has disadvantages, fails to provided support for an anticipation rejection of a system that utilizes an interrupt-based mechanism when system utilization is low, and a polling-based mechanism when system utilization is high.

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For at least the reasons given above and those previously provided in Appellants' Appeal Brief, Appellants respectfully request withdrawal of the §103(a), §102(a) and §102(e) rejections of claims 1-14. As such, the application is asserted to be in condition for allowance, and favorable action is respectfully solicited.

Respectfully submitted,

Date: January 29, 2007

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